

In view of the discovery of this new race of *P. carbo* in Western Uganda, the taxonomic status of the East African population of White-necked Cormorants must be reviewed. This bird must now be known as *Phalacrocorax lucidus lugubris* Rüppell, not *P. carbo lugubris*.



PLATE II

Left to right: *Phalacrocorax carbo sinensis*: male and female *P.c. patricki*.

Photographs by Bob Campbell

## A Chilean Pintail x Red-crested Pochard

by BRYAN L. SAGE

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This paper describes a male and female inter-generic hybrid in which the male parent was a Chilean Pintail *Anas georgica spinicauda* Vieillot, and the duck a Red-crested Pochard *Netta rufina* (Pallas). Both specimens were preserved as study skins in December 1964 and are now in my collection.

According to Gray (1958) the only previous instance of hybridisation between these species was a single example that was in the collection of

the Wildfowl Trust at Slimbridge, Gloucestershire, in 1952. Hybrids of this parentage do not, of course, occur in the wild state as the geographical ranges of the two species do not overlap.

MALE

*Plumage*

*Upper parts:*

Back and mantle dull hair-brown, slightly darker than in the Red-crested Pochard, and with extensive dark brown centres to the feathers of the back. Rump and upper-tail coverts grey-brown. Rectrices uniform darker brown.

*Under parts:*

Uniformly pale brown, slightly darker in the region of the vent and with a cinnamon suffusion on the upper breast and down the sides of the breast. Some feathers of the breast and abdomen with slightly darker centres



Male (left) and female (right) of Chilean Pintail x Red-crested Pochard. Note the white neck-ring in the male.

resulting in scattered faint spotting. The flank feathers extensively and finely vermiculated with wavy transverse bars of dark brown. Under tail-coverts dark brownish with paler tips and suffused with cinnamon.

*Head and neck:*

Entirely dark brown with a metallic purple gloss posterior to the eyes. Crown flecked with blackish. Chin pale brownish-white, this shade extending irregularly down the foreneck and also towards the base of the bill in the loreal region.

*Wings:*

Wing-coverts mouse-grey. Speculum darkish brown with no metallic gloss, and bordered above and below with whitish. Primaries grey-brown, darker towards the tips.

*Soft parts:*

Legs and feet greenish-grey. Iris dark reddish-brown. Bill yellow with a broad black line along the culmen, black nail, and narrowly bordered with black at the cutting edge from the nostrils to within about  $\frac{1}{4}$ " of the nail.

FEMALE

*Upper parts:*

Darker brown than the Red-crested Pochard, being about the same shade as the Chilean Pintail but lacking such marked pale edgings to the feathers. Rump, upper tail-coverts and rectrices as in male hybrid.

*Under parts:*

Similar to female Red-crested Pochard but with traces of spotting as in the Chilean Pintail. The upper breast, sides of the breast and flanks strongly suffused with cinnamon. Under tail-coverts pale grey-brown also strongly suffused with cinnamon.

*Head and neck:*

Forehead, lores, crown and sides of head forming a cap as in the female Red-crested Pochard, but a darker shade of brown, and without the spotting as in the Chilean Pintail. Remainder of face grey-brown, chin and foreneck pale buffish and unspotted.

*Wings:*

Wing-coverts mouse-grey. Speculum pale grey-brown bordered with whitish above and below. Primaries dark grey-brown, paler on the inner webs.

*Soft parts:*

Legs and feet greenish-grey. Iris dark reddish-brown. Bill yellow with broad black line along culmen; the yellow gives way to pale blue towards the tip. Nail and cutting edge each side black for about  $\frac{1}{2}$ ".

The measurements of the hybrids are not wholly intermediate, neither do they fall entirely within the range of either of the parental species. The wing measurement of both sexes falls within the range of the Chilean Pintail. The male hybrid has an intermediate culmen, whilst that of the female is within the range for the Red-crested Pochard. The maximum width of the bill in the hybrids is on the upper limit for that measurement in the Chilean Pintail, whilst in the depth of the bill at the posterior edge of the nostrils the male agrees with the Red-crested Pochard, but the female is well within the range for the Chilean Pintail.

## Comparative measurements (in mm.)

	Hybrids		Red-crested Pochard		Chilean Pintail	
	♂	♀	♂	♀	♂	♀
Wing	252	240	256-278	249-259	230-260	212-240
Culmen from feathers	47	45	48-52	44-50	41-43	40-41
Bill—max. width	21	21	24-28 (25.2)	24-25 (24.3)		18-21 (19.4)
depth at nostrils	20.5	17.5	19-21 (20.2)	18-20 (19.0)		16-21 (18.8)
Tail	78	76		58-74		140-148

- Notes: (a) wing and culmen measurements of the parental species are from Delacour & Scott (1956-1959).  
 (b) the measurements for maximum width of the bill and depth at nostrils in the parental species are from material in the British Museum (Natural History), 6 specimens in each case.  
 (c) figures in parentheses are average measurements.

## Discussion

The female hybrid does not call for any particular comment. As is evident from the plumage description it is, in all main characteristics, a clear intermediate between the parental species.

The male, however, exhibits a number of characters that call for comment. Not only is this hybrid the result of a cross between species in two different genera, the parental species are also quite different as regards sexual dimorphism in the plumage. In the Red-crested Pochard the sexes are markedly dimorphic, whilst in the Chilean Pintail they are alike. The resulting hybrid, rather than resembling either of the parental species, is in fact superficially similar to the drake of the Northern Pintail *Anas acuta acuta* Linnaeus. It has the dark brown head of this species, and the blackish markings on the crown feathers. There is a noticeable metallic purple gloss on the face below and behind the eyes, and on the sides of the neck. A similar gloss is found on the head of the drake Northern Pintail. The only character of the head plumage of the hybrid that can be referred to the Red-crested Pochard is the development of the feathers of the back of the head to form a distinct crest. The whitish-brown area on the chin, throat, foreneck, and at the lower base of the bill (see plate) is, I consider, derived from the Chilean Pintail in which it occurs in both sexes. A Northern Pintail character that has gained expression in the body plumage is the fine, wavy transverse barring on the feathers of the flanks. Certainly the most interesting character exhibited by this hybrid is the narrow whitish ring round the lower half of the base of the neck as shown in the accompanying photograph. The white neck-ring is found in its most advanced form in the Mallard *Anas platyrhynchos* Linnaeus, and the Falcated Duck *Anas falcata* Georgi, in which it is a normal character of the drakes in full plumage. The drake of the New Zealand Brown Teal *Anas aucklandica chlorotis* Gray has this character in a less developed form. It is also known to occur as a variant in other species of ducks such as the Gadwall *Anas strepera* Linnaeus (Harrison & Harrison 1959, 1963b), and the European Green-winged Teal *Anas crecca crecca* Linnaeus (Harrison & Harrison, 1962). It has also been noted in a hybrid Argentine Red Shoveler *Anas platalea* Vieillot x Northern Shoveler *Anas clypeata* Linnaeus (Harrison & Harrison 1963a). Furthermore, it occurs quite frequently as a transient character in the drake Northern Shoveler during moult, and less frequently



in the drake Northern Pintail in the same stage of plumage. There is now ample evidence that this character is indicative of a close relationship between the species mentioned.

There is, so far as I am aware, no record of a white neck-ring occurring as a variant in any stage of plumage of either the Red-crested Pochard or the Chilean Pintail. From the morphology of the drake hybrid under discussion we must postulate that one of the parental species, clearly the Chilean Pintail, is related to the Northern Pintail and carries genes for certain characteristics of that species which, in the present case, have gained expression as a result of hybridisation. There can be no reasonable doubt that the group of yellow-billed pintails of the southern hemisphere, which includes the Chilean Pintail, must have evolved from the same stock as the primarily northern hemisphere group of blue-billed pintails. In addition, the occurrence of a whitish neck-ring in the hybrid not only indicates relationship with the Northern Pintail and other species of *Anas* mentioned above, but also supports the hypothesis that this is an ancient character that is latent in numerous species of *Anas*.

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#### References:

- Delacour, J. and Scott, P. (1956 and 1959). *The Waterfowl of the World*, Vols. 2 and 3.  
 Gray, Annie P. (1958). *Bird Hybrids*.  
 Harrison, James M. and Jeffery G. (1959). Plumage Variants in Drake Gadwall. *Bull. B.O.C.* 79: 78-79.  
 — (1962). A European Green-winged Teal with a white neck-ring. *Ibid.* 82: 88-90.  
 — (1963a). Comments on a hybrid Red Shoveler x Northern Shoveler. *Ibid.* 83: 21-25.  
 — (1963b). A Gadwall with a white neck ring and a review of plumage variants in wildfowl. *Ibid.* 83: 101-108.

## The Crowned Crane at Lake Rudolf

by OSCAR T. OWRE

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It is unusual if one does not find in the narratives of African explorers and adventurers, observations of animal life. Titles of their works, however, are often of such nature that even should they come to the attention of the biologist they would fail to attract his curiosity. The limbo of such titles concerning Kenya yields to ornithology a book by Arthur H. Neumann (1898), *Elephant-Hunting in East Equatorial Africa*. Sir Frederick Jackson, it is true, noted (1938:323) Neumann as having been observer of the now famous bee-eater-bustard relationship, but there is no mention of Neumann or of his publication in Jackson's (1938) bibliography of Kenya ornithology.

Among the many interesting observations made by Neumann, the third European to visit the shores of Lake Rudolf, is the notation (*ibid*: